



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : A61K 38/36, 39/00, 39/395, C07K 14/00, 14/75, 16/00, 16/18, 16/36, 16/46, C12N 5/10, 5/20, 15/09, 15/10, 15/13, 15/63, C12P 21/02, 21/08</p>	A1	<p>(11) International Publication Number: <b>WO 95/29697</b></p> <p>(43) International Publication Date: 9 November 1995 (09.11.95)</p>
<p>(21) International Application Number: PCT/US95/05688</p> <p>(22) International Filing Date: 1 May 1995 (01.05.95)</p> <p>(30) Priority Data: 08/236,208 2 May 1994 (02.05.94) US</p> <p>(60) Parent Application or Grant (63) Related by Continuation US 08/236,208 (CIP) Filed on 2 May 1994 (02.05.94)</p> <p>(71) Applicant (for all designated States except US): ALEXION PHARMACEUTICALS, INC. [US/US]; Suite 360, 25 Sci- ence Park, New Haven, CT 06511 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): EVANS, Mark, J. [US/US]; 528 Wood Hill Road, Cheshire, CT 06410 (US). MATIS, Louis [US/US]; 775 Flintlock Road, Southport, CT 06490 (US). MUELLER, Eileen, Elliott [US/US]; 30 Silver Sands Road - Unit 19F, East Haven, CT 06512 (US). NYE, Steven, H. [US/US]; 6 Valley Run Drive, Cromwell,</p>	<p>CT 06416 (US). ROLLINS, Scott [US/US]; 12 Nutmeg Circle, Monroe, CT 06468 (US). ROTHER, Russell, P. [US/US]; 384 Black's Road, Cheshire, CT 06410 (US). SPRINGHORN, Jeremy, P. [US/US]; 105 Greens Loop, Cheshire, CT 06410 (US). SQUINTO, Stephen, P. [US/US]; 16 Coachmans Lane, Bethany, CT 06524 (US). THOMAS, Thomas, C. [US/US]; 23 Riverside Terrace, Madison, CT 06443 (US). WANG, Yi [CN/US]; 270 Sylvan Valley Road, Orange, CT 06477 (US). WILKINS, James, A. [US/US]; 21 Clark Road, Woodbridge, CT 06525 (US).</p> <p>(74) Agent: KLEE, Maurice, M.; 1951 Burr Street, Fairfield, CT 06430 (US).</p> <p>(81) Designated States: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	
<p>(54) Title: METHODS AND COMPOSITIONS FOR THE TREATMENT OF GLOMERULONEPHRITIS AND OTHER INFLAMMATORY DISEASES</p>		
<p>(57) Abstract</p> <p>The use of anti-C5 antibodies, e.g., monoclonal antibodies, to treat glomerulonephritis (GN) is disclosed. The administration of such antibodies at low dosage levels has been found to significantly reduce glomerular inflammation/enlargement and other pathologic conditions associated with GN. Also disclosed are novel anti-C5 antibodies and anti-C5 antibody-encoding nucleic acid molecules. These antibodies are useful in the treatment of GN and other inflammatory conditions involving pathologic activation of the complement system.</p>		

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US95/05688

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : Please See Extra Sheet.

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Extra Sheet.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, DIALOG, BIOSIS, EMBASE, CA, MEDLINE, WPI  
search terms: C5, C5a, C5b, glomerulonephritis, nephritis**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	COMPLEMENT. INFLAMM., VOLUME 8, ISSUED 1991, R. WURZNER ET AL., "INHIBITION OF TERMINAL COMPLEMENT COMPLEX FORMATION AND CELL LYSIS BY MONOCLONAL ANTIBODIES", PAGES 328-340, 1991, SEE ENTIRE DOCUMENT.	6-9 1-5, 10-61, 68-84, 86, 87
Y	US, A 5,135,916 (SIMS ET AL.) 04 AUGUST 1992, SEE ENTIRE DOCUMENT.-	1-61, 68-84, 86, 87
Y	ANN. REV. IMMUNOL., VOLUME 10, ISSUED 1992, S.I. MORRISON, "IN VITRO ANTIBODIES: STRATEGIES FOR PRODUCTION AND APPLICATION", PAGES 239-265, SEE ENTIRE DOCUMENT.	1-61, 68-84, 86, 87
Y	EUR. J. CLIN. INVEST., VOLUME 24, B.P. MORGAN, "CLINICAL COMPLEMENTOLOGY: RECENT PROGRESS AND FUTURE TRENDS", PAGES 219-228, SEE ENTIRE	1-9

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Z" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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## A. CLASSIFICATION OF SUBJECT MATTER:

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## A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

424/130.1, 140.1, 141.1, 145.1, 152.1, 158.1; 435/ 69.6, 70.2, 172.2, 172.3, 240.27, 252.4, 320.1; 530/300, 350, 381; 387.1, 388.1, 388.23, 388.25, 389.3; 536/23.4, 23.5, 23, 53

## B. FIELDS SEARCHED

Minimum documentation searched

Classification System: U.S.

424/130.1, 140.1, 141.1, 145.1, 152.1, 158.1; 435/ 69.6, 70.2, 172.2, 172.3, 240.27, 252.4, 320.1; 530/300, 350, 381; 387.1, 388.1, 388.23, 388.25, 389.3; 536/23.4, 23.5, 23, 53